

## **Incidence of the sustainability in the small and medium-sized enterprises (SMEs) efficiency**

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### **ABSTRACT**

**Background.** Nowadays, sustainability is one of the most studied concepts at the businesses level, and this allows the articulation of a variety of elements in the decision-making process. The previous orientated to the highest results achievement. The research looks forward to the formulation of a conceptual model that explains the causal relationship between sustainability from its economic, social, and environmental dimensions, and the technical and allocative efficiency of the small and medium-sized enterprises (SMEs) in Chile. In this context, strategic sectors are arranged as a mediation variable in the conceptual model proposed.

**Objectives.** As the main objective, it is proposed the evaluation of the incidence of sustainability from its economic, social, and environmental dimensions in the technical and allocative efficiency of the SMEs. Also, determine the efficiency of the SMEs throughout the technical and allocative dimensions, and validate the relationship between the sustainability and its incidence in the efficiency of the SMEs, based on the mediation effect of the strategic sectors.

**Type of research.** This research is based on a conceptual frame, and it is located in the epistemological post-positivism model from an empirical cosmo-view based on the hypothetico-deductive method. The type of study is both descriptive and explanatory.

**Time, tools, and sample.** The timing of the study is transversal. It was taken as a base the survey ELE-5 of Chile from the 2018 period. In addition to this, there was a structured review of the state of the art, which allowed the definition of the analysis variables and their scale of measurement. The tool was the survey ELE-5 of Chile from the 2018 period, made by the “Instituto Nacional de Estadísticas de Chile (INE, 2019)”. This survey is divided into five modules with 125 variables, and it was taken by 2,643 small and medium businesses as part of the sample. IT tools such as Excel, SPSS-25, PROCESS V4.0, and AMOS-23 were used in the data processing and causal statistical analysis.

**Design and analysis.** The methodological design is causal, quantitative, and non-experimental. The secondary data was collected, analyzed, and its results were interpreted and validated to complete the scientific method process. The data analysis was sequential with multivariate statistical analysis, factorial exploratory analysis, confirmatory factorial analysis in first and second grade, and mediation analysis.

**Preliminary results.** The conceptual model was designed, and the latent variables of sustainability were identified from the economic, social, and environmental dimensions. Thus, it was possible to assess its incidence in the technical and allocative efficiency of SMEs in Chile, and also the mediation relationship between the strategic sectors and the study variables.

**Conclusions.** The definition of sustainable development given by the United Nations in its report of Brundtland (1987) includes the concepts of sustainability and maintainability. Both concepts have motivated a discussion regarding their similitudes and differences. The debate created is from academic, business, and scientific contexts, where both concepts have been considered synonymous. Enhancing the research aiming to the well-being of humankind, sustainable development, proper utilization and preservation of natural resources to protect life on earth, are relevant topics, and do concern to the international community and compromise the SMEs. These topics are in the United Nations agenda of 2030.

**Keywords:** sustainability, efficiency, Small and medium-sized enterprises (SMEs), modeling.

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